

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

(1) ADJUSTMENT OF THE RATES OF VALLEY GAS, )	
INC., FOR AN INCREASE IN GAS RATES, AND )	CASE NO.
(2) FOR APPROVAL TO INCUR INDEBTEDNESS FOR )	9689
CONSTRUCTION PURPOSES )	

O R D E R

On September 8, 1986, Valley Gas, Inc., ("Valley") filed an application with the Commission requesting authority to increase its rates for gas service. Valley stated that its revenues were not sufficient to absorb its charges for gas purchased and its increased operating expenses. The amount of increased revenue sought by Valley was approximately \$49,759, an increase of approximately 24.47 percent over normalized gas sales revenue found reasonable herein. Based upon the findings and determinations herein, Valley's gas sales revenue will increase by approximately \$24,108 annually, an increase of 11.85 percent.

On November 11-12, 1986, the Commission's staff performed a limited scope audit of the revenues and expenses of Valley. On January 16, 1987, the Commission's staff issued a report on the rate case recommending a rate increase of approximately \$29,605 above the normalized gas sales revenues found reasonable herein. On January 23, 1987, a public hearing was held in this matter. There were no intervenors participating. The decisions of the Commission are based on the application, the staff report,

responses to data requests, evidence presented at the hearing and annual reports.

#### COMMENTARY

Valley is a public gas utility which services approximately 490 customers in Breckinridge County, Kentucky. Valley is supplied rented office space, labor, management, vehicles and insurance coverage from Irvington Gas Company ("Irvington"). Valley is commonly owned with Irvington.

#### TEST PERIOD

Valley and staff have proposed and the Commission has accepted the 12-month period ending June 30, 1986, as the test period for determining the reasonableness of the proposed rates. In using the historical test period, the Commission has given full consideration to appropriate known and measurable changes.

#### VALUATION

##### Net Investment

Valley proposed a rate base of \$59,786.<sup>1</sup> With the planned construction of approximately \$35,000, Valley's proposed net investment rate base was \$94,786 of which \$6,447 was a cash-working capital allowance. Staff recommended a net investment rate base of \$93,028 based on a cash-working capital allowance of \$4,689.<sup>2</sup>

The Commission agrees in part with Valley and in part with staff; however, the Commission differs with the proposed treatment

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<sup>1</sup> Application, Exhibit 2, filed September 8, 1986, page 1.

<sup>2</sup> Staff Report filed January 16, 1987, page 3.

of the planned construction included in rate base and the retired plant included in rate base. The joint administrative cost of \$8,609<sup>3</sup> was later amended to \$8,929,<sup>4</sup> thus increasing rate base by \$320. The reimbursement from the Commonwealth of Kentucky changed from \$16,603<sup>5</sup> to \$15,972,<sup>6</sup> thus increasing rate base by \$631. Third, Phase II at an estimated cost of \$12,743 has not been started as of the date of the hearing.<sup>7</sup> Phase II may not be started until March or April 1987.<sup>8</sup> Additionally, Phase II may not be completed under the terms of the original low bidder.<sup>9</sup> Although the Commission understands the inherent uncertainty in construction, the Commission finds that the Phase II project is too uncertain to meet known and measurable criteria, and therefore, should not be included in rate base at this time. Thus the rate base has been reduced by the amount of \$12,743 for the Phase II project. However, when the construction is completed and the costs are known, Valley may file a modified procedure as outlined under Modified Procedures herein.

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<sup>3</sup> Application, Exhibit 2, filed September 8, 1986, page 3.

<sup>4</sup> Hearing Transcript, Exhibit 2, January 23, 1987, page 10.

<sup>5</sup> Application, Exhibit 2, filed September 8, 1986, page 3.

<sup>6</sup> Hearing Transcript, Exhibit 2, January 23, 1987, page 13.

<sup>7</sup> Ibid., pages 51-52.

<sup>8</sup> Ibid., page 50.

<sup>9</sup> Ibid., page 54.

The planned construction included retirement of approximately \$1,270 of net plant in service.<sup>10</sup> Pursuant to the Uniform System of Accounts for Gas Utilities the plant retired should be excluded from plant in service. Therefore, in recognition of the new plant in rate base the old plant should be excluded; however, amortization expense of the early retirement has been included for rate-making purposes in a subsequent section of this Order.

The Commission has allowed a 1/8 cash-working capital allowance on operating and maintenance expenses less gas purchases found reasonable herein.

Therefore, the Commission finds Valley's net investment rate base to be as follows:

Plant in Service		\$ 167,701
ADD:		
Phase I	\$ 12,235	
Phase III	13,340	
Small Tools	2,508	
Joint Costs	8,929	
Engineering	<u>2,166</u>	
		\$ 39,178
DEDUCT:		
Accumulated Depreciation	114,362	
Plant Retired	1,270	
Reimbursement	<u>15,972</u>	
		<u>&lt;131,604&gt;</u>
Net Plant in Service		\$ 75,275
Cash-Working Capital		<u>4,250</u>
NET INVESTMENT RATE BASE		<u><u>\$ 79,525</u></u>

<sup>10</sup> Response to the Staff's Information Request, filed February 12, 1987.

### Capital Structure

Valley proposed a rate of return based upon a capital structure of \$96,473 in equity funds and \$35,000 of long-term debt at respective costs of 15 percent for equity and 12 percent for debt. Staff recommended a capital structure of \$51,513 in equity funds and \$35,000 in long-term debt at respective costs of 15 percent for equity and 12 percent for long-term debt.<sup>11</sup> Staff reduced equity funds by \$44,960 for \$20,000 in uncollected stock subscriptions and \$24,960 of paid but undeclared dividends. Valley concurred in the reduction of equity funds.<sup>12</sup>

The Commission notes that both Valley's and staff's recommendation of the amount of long-term debt allowed was based on the anticipated level of debt funding for the new construction. In accordance with the decision to not include at this time \$12,743 of construction in rate base, the Commission did not include a like amount in the long-term debt which results in total long-term debt of \$23,206.<sup>13</sup>

Therefore, the combined equity of \$51,513 and long-term debt of \$23,206 results in a total allowed capitalization of \$74,719.

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<sup>11</sup> Staff Report filed January 16, 1987, page 2.

<sup>12</sup> Hearing Transcript, January 23, 1987, pages 67-69.

<sup>13</sup>

Phase I	\$12,235
Phase III	13,340
Small Tools	2,508
Joint Costs	8,929
Engineering	2,166
Reimbursement	<15,972>
ALLOWABLE LONG-TERM DEBT	<u>\$23,206</u>

## EXPENSES

### Gas Purchases

Valley proposed adjusted gas purchase expense of \$175,268. Staff recommended pro forma annual gas purchase expense of \$177,203 based on Purchase Gas Adjustment Case No. 6902-X and the reported 54,529 Mcf purchased at an average line loss of 2.5 percent. The Commission has determined pro forma annual gas purchases to be \$177,203 based on Purchase Gas Adjustment Case No. 6902-X, reported 54,529 Mcf purchased, an average line loss of approximately 2.5 percent and an average cost of gas purchases of \$3.2497 per Mcf.

### Labor, Management Fee, Rent, Vehicle Lease

Valley reported \$2,400 in labor, \$18,000 in management fees, \$2,421 in rent and \$2,400 in vehicle leases during the test period.<sup>14</sup> Valley proposed adjustments of \$1,296 to labor, \$4,176 to management fee, \$642 to rent and \$897 to vehicle leases.<sup>15</sup> All items are supplied by a related company, Irvington, and are not competitively bid nor does Irvington supply these services or rentals to other non-related companies.<sup>16</sup> The charges for these services are based primarily on Valley's ability to pay.<sup>17</sup> The

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<sup>14</sup> Application, Exhibit 1, filed September 8, 1986, page 2.

<sup>15</sup> Ibid., Exhibit 3, page 1.

<sup>16</sup> Hearing Transcript, Exhibit 2, January 23, 1987, page 75.

<sup>17</sup> Response to the Staff's Information Request, filed December 11, 1986, Item No. 18.

adjustments are all based on increases in price indices.<sup>18</sup> No records were kept that would support the charges from Irvington to Valley.<sup>19</sup>

Staff recommended denial of all test period adjustments because they are based on a nationwide urban index which would have little relevance to a privately-owned, cost-based regulated company in rural Irvington, and therefore, do not meet known and measurable criteria.<sup>20</sup>

The Commission is of the opinion that Valley has not sufficiently documented the proposed level of these expenses. No records were kept of the actual management time and cost devoted to Valley's operations. Similarly, no rate or shared cost documentation was available for rent, labor, or vehicle lease expenses. Irvington, which supplies these resources to Valley, may be subsidizing Valley's operating expenses; however, there is insufficient documentation at this time to justify any increase beyond the actual test period amounts. Therefore, the Commission will not include the proposed adjustments for rate-making purposes herein.

#### Bad Debts

Valley reported \$72 in bad debts expense for the test period.<sup>21</sup> Valley proposed an additional \$1,826 in bad debts

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<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Staff Report filed January 16, 1987, page 4.

<sup>21</sup> Application, Exhibit 3, filed September 8, 1986, page 1.

expense based on .9336 percent of proposed revenues.<sup>22</sup> Valley stated that a substantial increase is warranted due to the amount of increase [in revenues] and the time of year the increase will go into effect. Valley stated that a review of gas systems located in Eastern Kentucky indicated a range of bad debts expense from 1/2 percent to 2 percent and Valley had chosen a midpoint estimation.<sup>23</sup>

Staff stated that the 1983, 1984, and 1985 Annual Reports and the test-period financial statements indicate that the average bad debt percentage for Valley is approximately .04 percent of gas sales. The staff recommended denial of the proposed adjustment and further recommended that the test period level of \$72 be used for rate-making purposes.<sup>24</sup>

The Commission notes that the level of sales revenue allowed herein is lower than the reported revenues for 1983, 1984, and 1985, as represented by Valley's Annual Reports. The Commission also notes that the amount of additional revenues granted herein is substantially less than the additional revenues sought by Valley. Therefore, since the level of revenues granted is lower than historically reported and since the revenue increase is less dramatic than proposed, the Commission is of the opinion that the historical relationship of .04 percent is a better estimate of the

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<sup>22</sup> Response to the Staff's Information Request filed December 11, 1986, Item No. 19.

<sup>23</sup> Hearing Transcript, January 23, 1987, page 75.

<sup>24</sup> Staff Report filed January 16, 1987, page 4.



recurring amount of bad debts expense than is an estimate based on Eastern Kentucky gas utilities. Therefore, the Commission has increased the level of bad debts expense for rate-making purposes by \$20 to \$92 annually based on .04 percent of the revenues found reasonable in this Order.

#### Liability Insurance

Valley reported \$3,500 in liability insurance for the test period. Valley proposed a \$6,500 adjustment for an annual liability insurance expense of \$10,000 based upon its estimation of the cost of insurance.<sup>25</sup> However, during the hearing, Valley felt that insurance could be obtained for \$7,500 per year.<sup>26</sup> Valley also indicated that it would not be purchasing insurance at the present time since the cost is prohibitive. Currently, Valley has no liability insurance.<sup>27</sup>

Staff recommended denial of the proposed increase of \$6,500 and inclusion of the actual test period cost of \$3,500 for liability insurance.<sup>28</sup>

Since there is no insurance currently in effect and since there is not a commitment for insurance, the Commission is of the opinion that it should not include any amount for liability insurance in Valley's rates. Therefore, the Commission has reduced the test period expense of liability insurance by \$3,500. However,

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<sup>25</sup> Application, Exhibit 3, filed September 8, 1986, page 1.

<sup>26</sup> Hearing Transcript, January 23, 1987, page 84.

<sup>27</sup> Ibid., page 79.

<sup>28</sup> Staff Report filed January 16, 1987, page 5.

the Commission is aware that such insurance is a prudent and necessary cost of service in Valley's case and suggests that Valley file under the Modified Procedure explained later in this Order.

#### Depreciation Expense

Valley reported \$6,350 in actual test-year depreciation expense.<sup>29</sup> Valley proposed a \$1,325 adjustment to depreciation expense based on 3.785 percent of its proposed new construction of \$35,000. Staff had no recommendation on this issue.

The Commission cites its earlier discussion of the amount of new construction allowable for rate-making purposes, \$23,206, and has calculated, based on 3.785 percent of the allowable new construction, an adjustment increasing test-year depreciation expense by approximately \$878 annually. However, the Commission also notes that approximately \$67 of test-period depreciation expense is attributable to retired plant,<sup>30</sup> which by nature is no longer used and useful. The net effect of these adjustments is to increase depreciation expense by \$811 annually.

#### Amortization Expense

Due to the unexpected relocation of Highway US 60, Valley incurred an early retirement of approximately \$1,270 net book value of its plant in service. Although earlier under net investment rate base, the Commission did not include a return on these

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<sup>29</sup> Application, Exhibit 3, filed September 8, 1986, page 1.

<sup>30</sup> Response to the Staff's Information Request, filed February 12, 1987.

assets, the Commission finds that Valley should recapture its original investment on these facilities since circumstances beyond their control required the relocation of these facilities. The Commission finds it fair, just, and reasonable for Valley to recapture its investment over a 10-year amortization period and has included amortization expense of \$127 annually.

After consideration of all pro forma adjustments and applicable income tax effects, the Commission finds Valley's adjusted test period operations to be as follows:

	<u>Test Period Reported</u>	<u>Adjustments</u>	<u>Test Period Adjusted</u>
Operating Revenues	\$223,458	\$<17,867>	\$ 205,591
Operating Expenses	<u>235,525</u>	<u>&lt;17,015&gt;</u>	<u>218,510</u>
Operating Income	\$<12,067>	\$ <852>	<12,919>
Interest Expense	<u>567</u>	<u>-0-</u>	<u>567</u>
NET INCOME	<u>\$&lt;12,634&gt;</u>	<u>\$ &lt;852&gt;</u>	<u>\$ &lt;13,486&gt;</u>

#### RATE OF RETURN SUMMARY

The Commission concurs with the staff's and Valley's recommendation of rates of 12 percent and 15 percent for debt and equity funds, respectively. Applying rates of 12 percent for long-term debt and 15 percent for common equity to the capital structure approved herein produces an overall cost of capital of 14.07 percent. The additional revenue granted herein will provide a rate of return on net investment rate base of 14.07 percent. The Commission finds this overall cost of capital to be fair, just and reasonable.

### REVENUE REQUIREMENTS

Valley proposed that its revenue requirements be based on total proposed operating expenses and its proposed rate of return of 14.2 percent be applied to total capital of \$131,473 which resulted in operating income of \$18,670.<sup>31</sup> Staff, however, recommended that the rate of return be applied to net investment rate base to determine revenue requirements.<sup>32</sup>

The Commission is of the opinion that the rate of return based on the weighted average cost of capitalization should be applied to net investment rate base, because net investment rate base is the amount of the capitalization used and useful in supplying service to the utility's customers. Therefore, the Commission has determined Valley's revenue requirements to be as follows:

Net Investment Rate Base	\$ 79,522
Rate of Return	X 14.07%
Required Operating Income	\$ 11,189
Operating Expenses	218,510
Required Operating Revenue	\$229,699
Normalized Revenues	<205,591>
Required Increase	<u>\$ 24,108</u>

The Commission has determined that Valley needs additional annual operating income of approximately \$24,108 to produce an overall return on net investment rate base of 14.07 percent. To achieve this level of operating income, Valley is entitled to increase its annual revenues by \$24,108 over normalized operating revenues as

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<sup>31</sup> Application, Exhibit 2, filed September 8, 1986, page 1.

<sup>32</sup> Staff Report filed January 16, 1987, page 6.

determined herein. The rates and charges in Appendix A are designed to produce gross operating revenue, based upon the adjusted test year, of \$229,699.

#### RATE DESIGN

In its application of September 8, 1986, Valley proposed a customer charge of \$5 per month. Insufficient support for this rate level has been provided by Valley. After considering the evidence of record, the Commission is of the opinion that a \$3 customer charge is more reasonable and more in line with customer charges of other gas utilities than is the \$5 charge. The rates contained in Appendix A reflect the proposed rate structure of a customer charge and a level per Mcf rate. The per Mcf rate includes all changes in rates through Purchased Gas Adjustment Case No. 6902-Z.

#### OTHER CONSIDERATIONS

As part of the construction of Phase I and Phase III, Valley retired approximately \$2,208 of original cost plant which had associated accumulated depreciation of approximately \$938 for a net carrying amount of \$1,270. According to the rate-making treatment given these costs Valley should make the following journal entry:

<u>Account No.</u>	<u>Account Title</u>	<u>Debit</u>	<u>Credit</u>
110	Accumulated Provision for Depreciation	\$ 938	
182	Extraordinary Property Losses	1,270	
101	Utility Plant		\$2,208

Also as part of the construction Valley is to receive a reimbursement for its construction costs of approximately \$15,972. Valley

is reminded that the reimbursement is to be accounted for as a contribution in aid of construction and should be used to reduce the carrying amount of construction cost charged to utility plant.

The Valley system was installed in 1963. It consists primarily of cathodically-protected steel pipe. During the past 3 years two cathodic protection surveys have been performed on the system to determine the degree of any active corrosion. Each survey demonstrated that Valley has a quality maintenance program. The consultant who conducted the June 1984 survey, S. H. Stephenson of S & S Corrosion Services, stated that the "gas system seems to have an excellent maintenance program and...is in better condition than most systems that I have seen."

The Commission notes that according to Valley's 1985 Annual Report the "lost and unaccounted-for" gas is only 1.6 percent. The Commission concludes that this figure is principally the result of differences in the method and timing of the billings by Valley to its customers and the billings from Valley's supplier, Texas Gas Transmission Company. The "lost and unaccounted-for" gas does not appear to be the result of leaks in the pipe or any general deterioration of the system. This conclusion is based upon the results from the aforementioned cathodic protection surveys and the overall quality of Valley's maintenance program as determined through annual safety inspections performed by the Commission's Gas Safety Branch.

The Commission is of the opinion that Valley's maintenance activities and overall compliance with the pipeline safety regulations (807 KAR 5:022) are of a degree and quality generally

associated with a much larger gas distribution utility with far greater resources. The Commission commends L. Kenneth Kasey, the owner and operator of Valley, for his cooperation with the Gas Safety Branch's investigators and his continued desire to operate a safe and efficient gas distribution utility.

#### MODIFIED PROCEDURE

In this Order, the Commission has not included funds for liability insurance nor has the Commission included for rate-making purposes a return on the Phase II construction and the related depreciation expense. The Commission is aware that liability insurance is usually considered a necessary cost of business and that Phase II construction, when completed, will be a used and useful addition to Valley's system. However, these items cannot be considered for rate-making purposes until their amounts are known and found to be reasonable. In recognition of the unique circumstances surrounding these expenditures and in an effort to minimize the burden and expense of filing another rate case, the Commission will allow Valley to recover additional revenues as part of this case. Within 6 months of the date of this Order, Valley may file documentation supporting the final cost and prudence of liability insurance and the completed Phase II construction. The Commission will then reopen this case, review the documentation, determine the reasonableness of the expenditures and adjust Valley's rates as found to be appropriate.

Documentation for the liability insurance should include a paid premium invoice, the coverage and terms of the insurance and the price, terms, and coverage of insurance quotes rejected in

favor of the insurance purchased. Documentation of the Phase II construction should include a copy of the original invoices to construct, a copy of the bill of materials and labor, and a copy of the as-built drawings.

#### SUMMARY

The Commission, after consideration of the evidence of record and being advised, is of the opinion and finds that:

1. The proposed rates are excessive and unreasonable in that they produce revenue in excess of the level found reasonable herein and should be denied.

2. The rates and charges in Appendix A are the fair, just and reasonable rates and charges to be charged by Valley.

3. Within 6 months of the date of this Order, Valley may file documentation supporting the reasonable costs associated with liability insurance and Phase II construction. The Commission will then review the documentation and, if appropriate, reopen this proceeding and adjust Valley's rates.

IT IS THEREFORE ORDERED that:

1. The rates in Appendix A are approved for service rendered by Valley on and after the date of this Order.

2. The rates proposed by Valley are hereby denied.

3. Valley shall file the as-built drawings of Phase I and Phase III as they become available.

4. Within 30 days from the date of this Order, Valley shall file with this Commission its revised tariff sheets setting out the rates approved herein.



5. Valley be and it hereby is granted authority to file, within 6 months of the date of this Order, documentation to support the reasonableness of its expenditures for liability insurance and Phase II construction.

Done at Frankfort, Kentucky, this 8th day of April, 1987.

PUBLIC SERVICE COMMISSION

Richard D. Hemminger  
Chairman

Paul H. L.  
Vice Chairman

James N. Williams  
Commissioner

ATTEST:

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Executive Director

## APPENDIX A

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 9689 DATED April 8, 1987.

The following rates and charges are prescribed for the customers served by Valley Gas, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order. The following rates and charges include all changes in rates through those approved in Case No. 6902-Z.

#### RATES:

All Mcf	\$3.74 per Mcf
Customer Charge	\$3.00 per Month

The base rate for the future application of the purchased gas adjustment clause of Valley Gas, Inc., shall be:

#### Commodity

Texas Gas Transmission Corp.	\$2.9887 per Mcf
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